

# Hospitalizations Among Members of the Active Component, U.S. Armed Forces, 2011

This report documents the frequencies, rates, trends, and distributions of hospitalizations of active component members of the U.S. Armed Forces during calendar year 2011. Summaries are based on standardized records of hospitalizations at U.S. military and non-military (reimbursed care) medical facilities worldwide. For this report, primary (first-listed) discharge diagnoses are considered indicative of the primary reasons for hospitalizations; summaries are based on the first three digits of ICD-9-CM codes used to report primary discharge diagnoses. Hospitalizations not routinely documented with standardized, automated records (e.g., during deployments, field training exercises, shipboard) are not centrally available for health surveillance purposes and thus are not included in this report.

## Frequencies, rates, and trends:

In 2011 there were 99,412 reports of hospitalizations of active component

members of the U.S. Army, Navy, Air Force, Marine Corps, and Coast Guard; 27 percent of the hospitalizations were in non-military facilities (**Table 1, Figure 1**). The hospitalization rate (all causes) was 68.2 per 1,000 service members per year. The annual hospitalization rate (all causes) was higher during 2011 compared to the previous years (overall hospitalization rate minimum: 54.9 per 1,000 person-years [p-yrs], 2006; maximum: 68.2 per 1,000 p-yrs, 2011) (**Figure 1**).

## Hospitalizations, by illness and injury categories:

As in prior years, in 2011 three diagnostic categories accounted for more than one-half (54.5%) of all hospitalizations of active component members: mental disorders (21.9%), pregnancy and delivery-related conditions (19.8%), and injuries and poisonings (12.8%) (**Table 1**). In contrast to 2007 and 2009, in 2011 there were more hospitalizations for mental disorders than for any other major category of illnesses or injuries (per the ICD-9-CM).

From 2007 to 2011, numbers of hospitalizations increased in 15 and decreased in two major categories of illnesses and injuries. The largest percentage increases between 2007 and 2011 were for “other” or V-coded hospitalizations (primarily orthopedic aftercare and rehabilitation following a previous illness or injury) (hosp diff, 2007-2011: +1,592; +66.3%) and for mental disorders (hosp diff, 2007-2011: +7,623; +54.0%). The only percentage decreases during the same period were for the skin and subcutaneous tissue (hosp diff, 2007-2011: -171; -7.3%) and injury and poisoning (hosp diff, 2007-2011: -354; -2.7%) categories (**Table 1**).

## Hospitalizations, by gender:

In 2011, the hospitalization rate (all causes) was more than two times higher among females than males (hospitalization rate, overall: females: 162.0 per 1,000 p-yrs; males: 52.3 per 1,000 p-yrs); however, pregnancy and delivery accounted for 57.8

**TABLE 1.** Hospitalizations, ICD-9-CM major diagnostic categories, active component, U.S. Armed Forces, 2007, 2009, and 2011

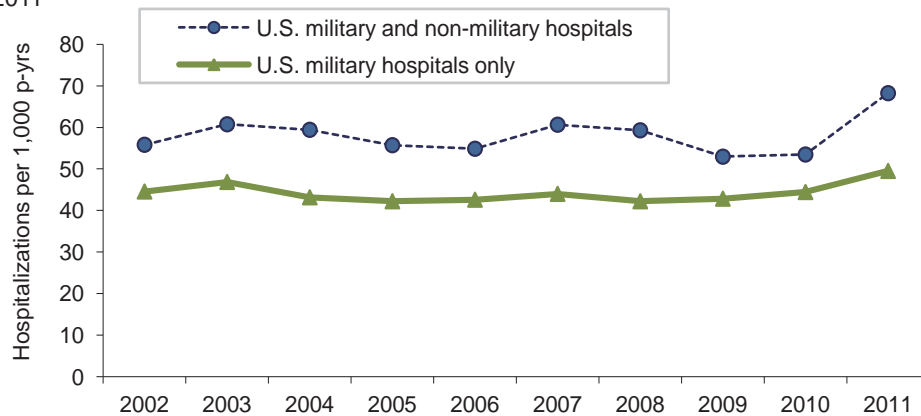
Major diagnostic category (ICD-9-CM)	2007			2009			2011		
	No.	Rate <sup>a</sup>	Rank	No.	Rate <sup>a</sup>	Rank	No.	Rate <sup>a</sup>	Rank
Mental disorders (290-319)	14,112	10.1	(2)	15,339	10.4	(2)	21,735	14.9	(1)
Pregnancy and delivery (630-679, relevant V-codes) <sup>b</sup>	18,326	13.1 (91.4)	(1)	16,009	10.9 (76.4)	(1)	19,722	13.5 (93.6)	(2)
Injury and poisoning (800-999)	13,095	9.4	(3)	10,063	6.8	(3)	12,741	8.7	(3)
Digestive system (520-579)	7,520	5.4	(5)	7,001	4.8	(4)	9,049	6.2	(4)
Musculoskeletal system/connective tissue (710-739)	7,643	5.5	(4)	6,721	4.6	(5)	7,885	5.4	(5)
Signs, symptoms, ill-defined conditions (780-799)	4,410	3.1	(6)	4,033	2.7	(6)	4,916	3.4	(6)
Other (V01-V82, except pregnancy-related)	2,402	1.7	(10)	2,387	1.6	(10)	3,994	2.7	(7)
Respiratory system (460-519)	2,966	2.1	(7)	3,268	2.2	(7)	3,090	2.1	(8)
Circulatory system (390-459)	2,645	1.9	(9)	2,483	1.7	(8)	3,027	2.1	(9)
Genitourinary system (580-629)	2,831	2.0	(8)	2,483	1.7	(9)	3,002	2.1	(10)
Nervous system (320-389)	1,782	1.3	(13)	1,755	1.2	(13)	2,429	1.7	(11)
Neoplasms (140-239)	2,024	1.4	(12)	1,821	1.2	(12)	2,238	1.5	(12)
Skin and subcutaneous tissue (680-709)	2,353	1.7	(11)	1,984	1.4	(11)	2,182	1.5	(13)
Infectious and parasitic diseases (001-139)	1,342	1.0	(14)	1,119	0.8	(14)	1,546	1.1	(14)
Endocrine, nutrition, immunity (240-279)	830	0.6	(15)	804	0.5	(15)	1,005	0.7	(15)
Congenital anomalies (740-759)	337	0.2	(16)	309	0.2	(17)	469	0.3	(16)
Hematologic disorders (280-289)	318	0.2	(17)	326	0.2	(16)	382	0.3	(17)
Total	84,936	60.7		77,905	53.0		99,412	68.2	

<sup>a</sup>Rates are expressed as hospitalizations per 1,000 p-yrs

<sup>b</sup>Rate of pregnancy and delivery-related hospitalizations among females only (in parentheses)

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**FIGURE 1.** Rate of hospitalization by year, active component, U.S. Armed Forces, 2002-2011



percent of all hospitalizations of females. The rate of hospitalizations for conditions not related to pregnancy and delivery was almost one-third (30.6%) higher among females (68.4 per 1,000 per year) than males (**data not shown**).

Hospitalization rates were higher among males than females for injuries and poisonings (male:female [m:f], rate ratio [RR]: 1.45; rate difference [RD]: 2.8 per 1,000 p-yrs), musculoskeletal system/connective tissue disorders (m:f, RR: 1.13; RD: 0.6 per 1,000 p-yrs), and skin and subcutaneous tissue disorders (m:f, RR: 1.64; RD: 0.6 per 1,000 p-yrs). Hospitalization rates were similar among males and females for circulatory disorders (m:f, RR: 1.09; RD: 0.2 per 1,000 p-yrs) and respiratory diseases (m:f, RR: 1.03; RD: 0.1 per 1,000 p-yrs). Hospitalization rates were higher among females than males for the other 12 major disease-specific categories. Of these 12 categories, the largest absolute differences in hospitalization rates between females and males were for genitourinary disorders (RD: 6.2 per 1,000 p-yrs), mental disorders (RD: 4.3 per 1,000 p-yrs), and neoplasms (RD: 3.4 per 1,000 p-yrs) (**data not shown**).

Relationships between age and hospitalization rates significantly varied across illness- and injury-specific categories (**Figure 2**). For example, among both males and females, hospitalization rates sharply increased with age for neoplasms, circulatory, genitourinary, and musculoskeletal system/connective tissue disorders; rates decreased with age for mental disorders; and rates were generally stable across age groups for infectious and parasitic diseases,

digestive disorders, and injuries and poisonings (**Figure 2**).

#### Most frequent diagnoses:

In 2011, seven diagnoses (at the 3-digit level of the ICD-9-CM) each accounted for more than 1,400 hospitalizations among males: adjustment reactions (n=5,503), episodic mood disorders (n=4,142), intervertebral disc disorders (n=2,305), alcohol dependence syndrome (n=2,150), acute appendicitis (n=2,096), symptoms involving the respiratory system (n=1,495), and other cellulitis and abscess (n=1,442). These seven diagnoses accounted for 30 percent of all hospitalizations of males in 2011 (**Table 2**).

In 2011, pregnancy and delivery-related conditions accounted for 58 percent of all hospitalizations of females (**Table 3**). Other than pregnancy and delivery-related diagnoses, leading causes of hospitalizations of females were adjustment reactions (n=1,359), episodic mood disorders (n=1,158), uterine leiomyoma (n=541), depressive disorder (n=338), acute appendicitis (n=324), and intervertebral disc disorders (n=295). These six diagnoses accounted for 28 percent of all hospitalizations (not related to pregnancy/delivery) of females (**Table 3**).

#### Mental health conditions:

In 2011 mental disorders accounted for more hospitalizations of U.S. service members than any other major category of diagnoses (**Table 1**). Adjustment reactions (including post-traumatic stress disorder)

and episodic mood disorders were associated with more hospitalizations among active component members than any other specific condition (at the 3-digit level); together, these two conditions accounted for 15 percent and 17 percent of all hospitalizations of males and females (excluding pregnancy and delivery-related), respectively (**Tables 2,3**).

#### Injuries and poisonings:

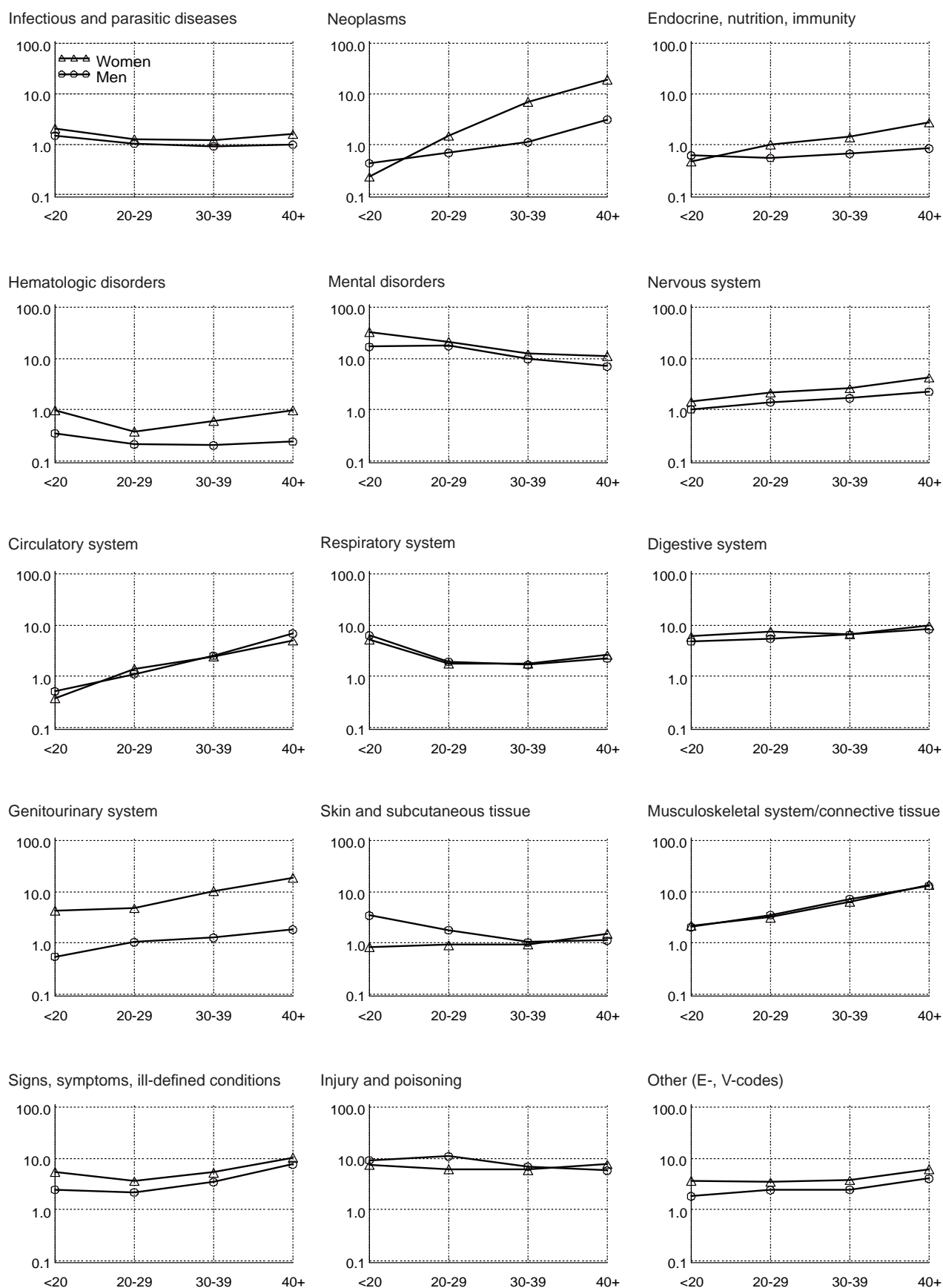
As in the past, in 2011, injuries and poisonings were a leading cause of hospitalizations of U.S. military members (**Table 1**). Of all injuries and poisonings that resulted in hospitalizations in U.S. military medical facilities (n=9,286), approximately one in seven (n=1,367; 14.7%) were reported as “intentionally inflicted” (e.g., enemy weapons; suicide gestures/attempts; fights, assaults, legal interventions) of which the majority (n=851; 62.3%) were reported as “battle casualties” (**Table 4**). Of all “unintentional” injuries and poisonings that resulted in hospitalizations in U.S. military facilities (n=7,885), approximately two-thirds (63.2%) were considered caused by falls and miscellaneous (n=2,011), complications of medical or surgical care (n=1,626), or guns and explosives (n=1,350) (**Table 4**).

Among males, injury and poisoning-related hospitalizations were most often related to complications of medical and surgical procedures and fractures of face, ankle, or leg bones (**Table 2**). Among females, injury and poisoning-related hospitalizations were most often related to complications of medical and surgical procedures, poisonings (analgesics, antipyretics, antirheumatics, psychotropic agents), and ankle fractures (**Table 3**).

#### Durations of hospitalizations:

Since 2002, the median durations of hospitalizations (all causes) have been stable (3 days), but the durations of the longest hospitalizations have increased (**Figure 3**). In 2011 as in previous years, medians and ranges of durations of hospitalizations significantly varied across major diagnostic categories. For example, median lengths of hospitalizations varied from two days (e.g., musculoskeletal system/connective tissue

**FIGURE 2.** Rate (per 1,000 p-yrs) of hospitalization by major diagnostic categories, by age and gender, active component, U.S. Armed Forces, 2011



**TABLE 2.** Most frequent diagnoses during hospitalization by major diagnostic category, males, active component, U.S. Armed Forces, 2011

Diagnostic category (ICD-9-CM codes) ♂	No.	%
<b>Infectious and parasitic diseases (001 - 139)</b>	1,267	
Intestinal infections due to other organisms	212	16.7
Meningitis due to enterovirus	187	14.8
Septicemia	184	14.5
Ill-defined intestinal infections	122	9.6
Viral and chlamydial infection	76	6.0
<b>Neoplasms (140 - 239)</b>	1,304	
Malignant neoplasm of prostate	88	6.7
Malignant neoplasm of thyroid gland	84	6.4
Malignant neoplasm of brain	80	6.1
Malignant neoplasm of testis	72	5.5
Malignant neoplasm of colon	45	3.5
<b>Endocrine, nutrition, immunity (240 - 279)</b>	749	
Disorders of fluid electrolyte and acid-base balance	242	32.3
Diabetes mellitus	225	30.0
Overweight, obesity and other hyperalimentation	60	8.0
Nontoxic nodular goiter	47	6.3
Thyrotoxicosis with or without goiter	43	5.7
<b>Hematologic disorders (280 - 289)</b>	272	
Diseases of white blood cells	94	34.6
Other diseases of blood and blood-forming organs	52	19.1
Purpura and other hemorrhagic conditions	38	14.0
Aplastic anemia	24	8.8
Other and unspecified anemias	24	8.8
<b>Mental disorders (290 - 319)</b>	17,819	
Adjustment reaction	5,503	30.9
Episodic mood disorders	4,142	23.2
Alcohol dependence syndrome	2,150	12.1
Depressive disorder not elsewhere classified	1,209	6.8
Nondependent abuse of drugs	1,037	5.8
<b>Nervous system (320 - 389)</b>	1,924	
Pain, not elsewhere classified	354	18.4
Organic sleep disorders	289	15.0
Epilepsy	219	11.4
Migraine	161	8.4
Other conditions of brain	93	4.8
<b>Circulatory system (390 - 459)</b>	2,620	
Cardiac dysrhythmias	558	21.3
Acute pulmonary heart disease	314	12.0
Acute myocardial infarction	185	7.1
Other forms of chronic ischemic heart disease	174	6.6
Other venous embolism and thrombosis	149	5.7
<b>Respiratory system (460 - 519)</b>	2,655	
Pneumonia organism unspecified	857	32.3
Pneumothorax	202	7.6
Deviated nasal septum	169	6.4
Other diseases of lung	161	6.1
Chronic disease of tonsils and adenoids	157	5.9

Diagnostic category (ICD-9-CM codes) ♂	No.	%
<b>Digestive system (520 - 579)</b>	7,502	
Acute appendicitis	2,096	27.9
Dentofacial anomalies including malocclusion	582	7.8
Cholelithiasis	491	6.5
Diseases of pancreas	428	5.7
Diseases of esophagus	417	5.6
<b>Genitourinary system (580 - 629)</b>	1,442	
Calculus of kidney and ureter	445	30.9
Acute renal failure	245	17.0
Other disorders of male genital organs	167	11.6
Urethral stricture	105	7.3
Other disorders of kidney and ureter	73	5.1
<b>Skin and subcutaneous tissue (680 - 709)</b>	1,978	
Other cellulitis and abscess	1,442	72.9
Pilonidal cyst	164	8.3
Cellulitis and abscess of finger and toe	116	5.9
Other disorders of skin and subcutaneous tissue	50	2.5
Other hypertrophic and atrophic conditions of skin	36	1.8
<b>Musculoskeletal system/connective tissue (710 - 739)</b>	6,857	
Intervertebral disc disorders	2,305	33.6
Disorders of muscle ligament and fascia	578	8.4
Spondylosis and allied disorders	490	7.1
Osteoarthritis and allied disorders	431	6.3
Other and unspecified disorders of back	428	6.2
<b>Congenital anomalies (740 - 759)</b>	365	
Other congenital musculoskeletal anomalies	91	24.9
Anomalies of bulbus cordis, cardiac septal closure	43	11.8
Other congenital anomalies of digestive system	33	9.0
Other congenital anomalies of heart	32	8.8
Other congenital anomalies of circulatory system	30	8.2
<b>Signs, symptoms, and ill-defined conditions (780 - 799)</b>	3,915	
Symptoms involving respiratory system	1,495	38.2
General symptoms	1,213	31.0
Other symptoms involving abdomen and pelvis	510	13.0
Symptoms involving head and neck	174	4.4
Symptoms involving digestive system	146	3.7
<b>Injury and poisoning (800 - 999)</b>	11,410	
Other complications of procedures not elsewhere classified	972	8.5
Fracture of ankle	580	5.1
Complications peculiar to certain specified procedures	511	4.5
Fracture of face bones	474	4.2
Fracture of tibia and fibula	453	4.0
<b>Other (V01-V82, except pregnancy-related)</b>	3,199	
Encounter for other and unspecified procedures, aftercare	1,008	31.5
Observation, evaluation for suspected conditions not found	500	15.6
Convalescence and palliative care	422	13.2
Care involving use of rehabilitation procedures	396	12.4
Other orthopedic aftercare	385	12.0

**TABLE 3.** Most frequent diagnoses during hospitalization by major diagnostic category, females, active component, U.S. Armed Forces, 2011

Diagnostic category (ICD-9-CM codes)	♀	No.	%
<b>Infectious and parasitic diseases (001 - 139)</b>		279	
Intestinal infections due to other organisms		48	17.2
Septicemia		47	16.8
Meningitis due to enterovirus		43	15.4
Ill-defined intestinal infections		29	10.4
Viral and chlamydial infection		21	7.5
<b>Neoplasms (140 - 239)</b>		934	
Uterine leiomyoma		541	57.9
Malignant neoplasm of thyroid gland		51	5.5
Malignant neoplasm of female breast		45	4.8
Benign neoplasm of ovary		43	4.6
Malignant neoplasm of ovary, other uterine adnexa		23	2.5
<b>Endocrine, nutrition, immunity (240 - 279)</b>		256	
Disorders of fluid electrolyte and acid-base balance		68	26.6
Nontoxic nodular goiter		58	22.7
Overweight, obesity and other hyperalimentation		35	13.7
Thyrotoxicosis with or without goiter		31	12.1
Diabetes mellitus		15	5.9
<b>Hematologic disorders (280 - 289)</b>		110	
Iron deficiency anemias		39	35.5
Other and unspecified anemias		19	17.3
Purpura and other hemorrhagic conditions		14	12.7
Diseases of white blood cells		14	12.7
Hereditary hemolytic anemias		10	9.1
<b>Mental disorders (290 - 319)</b>		3,916	
Adjustment reaction		1,359	34.7
Episodic mood disorders		1,158	29.6
Depressive disorder not elsewhere classified		338	8.6
Alcohol dependence syndrome		227	5.8
Anxiety, dissociative and somatoform disorders		226	5.8
<b>Nervous system (320 - 389)</b>		505	
Migraine		97	19.2
Pain, not elsewhere classified		84	16.6
Epilepsy		60	11.9
Other conditions of brain		35	6.9
Multiple sclerosis		22	4.4
<b>Circulatory system (390 - 459)</b>		407	
Acute pulmonary heart disease		80	19.7
Cardiac dysrhythmias		76	18.7
Other venous embolism and thrombosis		31	7.6
Hemorrhoids		25	6.1
Other and ill-defined cerebrovascular disease		18	4.4
<b>Respiratory system (460 - 519)</b>		435	
Pneumonia organism unspecified		86	19.8
Asthma		49	11.3
Chronic disease of tonsils and adenoids		46	10.6
Acute tonsillitis		26	6.0
Other diseases of lung		24	5.5

Diagnostic category (ICD-9-CM codes)	♀	No.	%
<b>Digestive system (520 - 579)</b>		1,547	
Acute appendicitis		324	20.9
Cholelithiasis		224	14.5
Dentofacial anomalies including malocclusion		213	13.8
Other and unspecified noninfectious gastroenteritis and colitis		77	5.0
Diseases of pancreas		71	4.6
<b>Genitourinary system (580 - 629)</b>		1,560	
Disorders of menstruation and other abnormal bleeding		283	18.1
Infections of kidney		192	12.3
Pain, other symptoms associated with female genital organs		178	11.4
Noninflammatory disorders of ovary fallopian tube		155	9.9
Other disorders of breast		135	8.7
<b>Pregnancy and delivery (630 - 679, relevant V-codes)</b>		19,722	
Trauma to perineum and vulva during delivery		4,984	25.3
Other indications for care or intervention related to labor		1,624	8.2
Other conditions complicating pregnancy		1,468	7.4
Abnormality of organs and soft tissues of pelvis		1,400	7.1
Hypertension complicating pregnancy, childbirth		1,360	6.9
<b>Skin and subcutaneous tissue (680 - 709)</b>		204	
Other cellulitis and abscess		116	56.9
Pilonidal cyst		18	8.8
Other hypertrophic and atrophic conditions of skin		11	5.4
Erythematous conditions		10	4.9
Other disorders of skin and subcutaneous tissue		10	4.9
<b>Musculoskeletal system/connective tissue (710 - 739)</b>		1,028	
Intervertebral disc disorders		295	28.7
Other derangement of joint		87	8.5
Other and unspecified disorders of back		81	7.9
Other disorders of bone and cartilage		70	6.8
Spondylosis and allied disorders		59	5.7
<b>Signs, symptoms, ill-defined conditions (780 - 799)</b>		1,001	
General symptoms		286	28.6
Other symptoms involving abdomen and pelvis		263	26.3
Symptoms involving respiratory system		239	23.9
Symptoms involving head and neck		60	6.0
Symptoms involving digestive system		48	4.8
<b>Injury and poisoning (800 - 999)</b>		1,331	
Other complications of procedures not elsewhere classified		198	14.9
Complications peculiar to certain specified procedures		104	7.8
Poisoning by analgesics antipyretics and antirheumatics		93	7.0
Poisoning by psychotropic agents		86	6.5
Fracture of ankle		75	5.6
<b>Other (V01-V82, except pregnancy-related)</b>		795	
Observation and evaluation for suspected conditions not found		267	33.6
Encounter for other and unspecified procedures and aftercare		185	23.3
Convalescence and palliative care		101	12.7
Care involving use of rehabilitation procedures		54	6.8
Other orthopedic aftercare		51	6.4



**TABLE 4.** Injury and poisoning hospitalizations<sup>a</sup> by causal agent<sup>b</sup>, active component, U.S. Armed Forces, 2011

Cause	No.	%
Unintentional	7,885	84.9
Fall and miscellaneous	2,011	21.7
Complications of medical/surgical care	1,626	17.5
Guns, explosives (includes accidents during war)	1,350	14.5
Land transport	959	10.3
Poisons and fire	649	7.0
Athletics	436	4.7
Environmental	320	3.4
Machinery, tools	262	2.8
Air transport	245	2.6
Water transport	27	0.3
Intentional	1,367	14.7
Battle casualty	851	9.2
Self-inflicted	416	4.5
Non-battle, inflicted by other	100	1.1
Missing/invalid code	34	0.4

<sup>a</sup>Hospitalizations in U.S. military medical facilities only  
<sup>b</sup>Causal agents were determined by codes IAW STANAG 2050

disorders; signs, symptoms, and ill-defined conditions) to five days (i.e., mental disorders). For most diagnostic categories, fewer than five percent of hospitalizations exceeded 9 days, but approximately five percent of mental disorder-related hospitalizations exceeded 31 days and five percent of “other” or V-coded hospitalizations (primarily orthopedic aftercare and rehabilitation following a previous illness or injury) exceeded 35 days (Figure 4).

#### Hospitalizations by service:

Among members of the Navy, Air Force, and Coast Guard, pregnancy and delivery-related conditions accounted for more hospitalizations than any other category of illnesses or injuries; however, among members of the Army and Marine Corps, mental disorders were the leading cause of hospitalizations. The crude hospitalization rate for mental disorders in the Army was approximately 70% higher than in the Marine Corps and more than twice as high than in the other Services (Table 5).

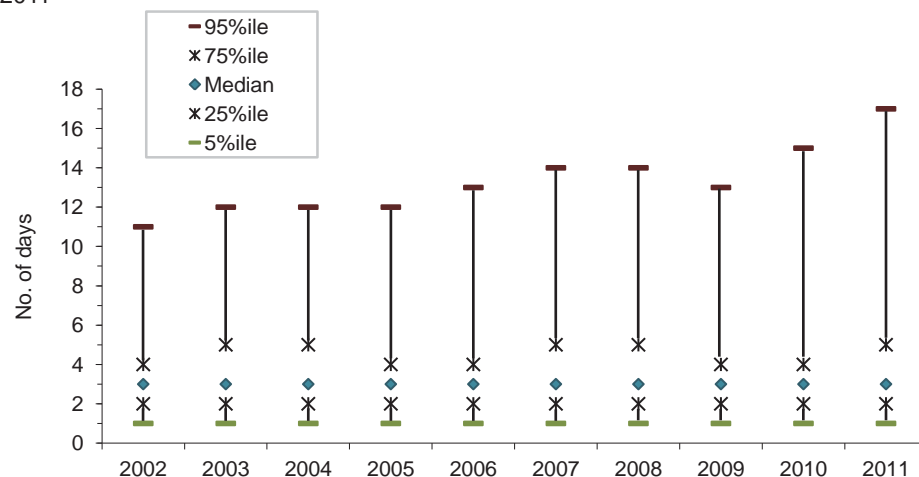
Injuries and poisonings were the second leading cause of hospitalizations in the Marine Corps, the third leading cause in the Army and Navy, and the fifth leading cause in the Air Force and Coast Guard. The hospitalization rate for injuries and poisonings was slightly higher among soldiers (12.6 per 1,000 p-yrs) than Marines (12.2 per 1,000 p-yrs) and more than twice as high among

soldiers and Marines than among members of the other Services (Table 5).

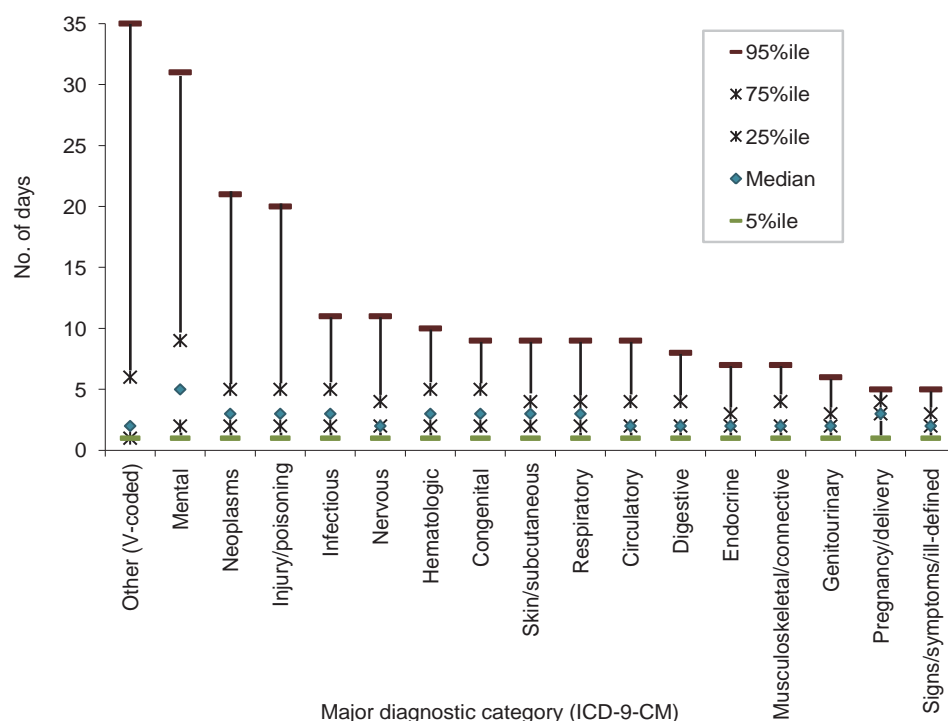
#### EDITORIAL COMMENT

In 2011, for every 15 active component service members, there was one hospitalization for any cause; for every

**FIGURE 3.** Length of hospital stay, by year, active component, U.S. Armed Forces, 2002–2011



**FIGURE 4.** Length of hospital stay by major diagnostic category, active component, U.S. Armed Forces, 2011



**TABLE 5.** Hospitalizations by service and ICD-9-CM diagnostic category, active component, U.S. Armed Forces, 2011

Major diagnostic category (ICD-9-CM)	Army		Navy		Air Force		Marine Corps		Coast Guard	
	No.	Rate <sup>a</sup>	No.	Rate <sup>a</sup>	No.	Rate <sup>a</sup>	No.	Rate <sup>a</sup>	No.	Rate <sup>a</sup>
Mental disorders (290 - 319)	13,003	23.1	3,066	9.5	2,797	8.5	2,606	13.0	263	6.3
Pregnancy and delivery (630-679, relevant V-codes) <sup>b</sup>	7,452	13.2(97.8)	4,786	14.9(91.6)	5,358	16.3(85.4)	1,749	8.7(128.0)	377	9.0(65.5)
Injury and poisoning (800 - 999)	7,075	12.6	1,626	5.1	1,467	4.5	2,454	12.2	119	2.8
Digestive system (520 - 579)	4,264	7.6	1,622	5.1	1,854	5.6	1,115	5.5	194	4.6
Musculoskeletal system/connective tissue (710 - 739)	3,951	7.0	1,122	3.5	1,778	5.4	887	4.4	147	3.5
Signs, symptoms, ill-defined conditions (780 - 799)	2,625	4.7	870	2.7	973	3.0	409	2.0	39	0.9
Other (V01-V82, except pregnancy-related)	2,156	3.8	689	2.1	497	1.5	587	2.9	65	1.6
Circulatory system (390 - 459)	1,590	2.8	515	1.6	602	1.8	257	1.3	63	1.5
Respiratory system (460 - 519)	1,568	2.8	414	1.3	515	1.6	552	2.7	41	1.0
Genitourinary system (580 - 629)	1,501	2.7	537	1.7	635	1.9	279	1.4	50	1.2
Nervous system (320 - 389)	1,296	2.3	399	1.2	445	1.4	256	1.3	33	0.8
Neoplasms (140 - 239)	1,026	1.8	483	1.5	516	1.6	166	0.8	47	1.1
Skin and subcutaneous tissue (680 - 709)	959	1.7	363	1.1	332	1.0	497	2.5	31	0.7
Infectious and parasitic diseases (001 - 139)	708	1.3	268	0.8	267	0.8	265	1.3	38	0.9
Endocrine, nutrition, immunity (240 - 279)	573	1.0	148	0.5	183	0.6	93	0.5	8	0.2
Congenital anomalies (740 - 759)	207	0.4	93	0.3	111	0.3	55	0.3	3	0.1
Hematologic disorders (280 - 289)	174	0.3	64	0.2	74	0.2	66	0.3	4	0.1
Total	50,128	88.9	17,065	53.1	18,404	51.9	12,293	61.1	1,522	36.4

<sup>a</sup>Rate expressed as hospitalizations per 1,000 p-yrs of service<sup>b</sup>Rate of pregnancy and delivery-related hospitalizations among females only (in parentheses)

18 members, there was one hospitalization for a condition not related to pregnancy and delivery. Hospitalization rates for all causes among active component members increased in 2011 compared to the past decade. As in the past, in 2011, mental disorders, pregnancy and delivery-related conditions, and injuries and poisonings accounted for more than one-half of all hospitalizations of active component members. Since 2007, hospitalizations for mental disorders increased by more than 50 percent; during the same period, hospitalizations for injuries and poisonings slightly decreased.

The recent sharp increase in hospitalizations for mental disorders likely reflects the effects of many factors including repeated deployments and prolonged exposures to combat stresses; increased awareness and concern regarding threats to mental health among unit commanders and other front line supervisors, service members and their families, and medical care providers; increased screening for and detection of mental disorders after combat-related service and other traumatizing experiences; and decreasing stigmas and

removal of barriers to seeking and receiving mental disorder diagnoses and care.

There are limitations to this summary that should be considered when interpreting the results. For example, the scope of this report is limited to members of the active components of the Services. Many reserve component members were hospitalized for illnesses and injuries while serving on active duty in 2011; these hospitalizations are not accounted for in this report. Also, many injury and poisoning-related hospitalizations occur in non-military hospitals; in most cases, the “external causes” of such injuries and poisonings are not reported on standardized records. If there are significant differences in the causes of injuries and poisonings that resulted in hospitalizations in U.S. military and non-military hospitals, the summary of external causes of injuries requiring hospital treatment reported here (Table 4) could be misleading. Also, this summary is based on primary (first-listed) discharge diagnoses only; in many hospitalized cases, there are multiple underlying conditions. For example, military members who are wounded in combat or injured in motor vehicle accidents may have multiple

injuries and complex medical and psychological complications. In such cases, only the first-listed discharge diagnosis would be accounted for in this report. Even with these and other limitations, this report provides useful and informative insights regarding the natures, rates, and distributions of the most serious illnesses and injuries that affect active component military members.

In 2011, adjustment reactions (including post-traumatic stress disorder), mood disorders, and intervertebral disc disorders were among the leading causes of hospitalizations of both male and female service members. In recent years, attention at the highest levels of the U.S. military and significant resources have been focused on detecting, diagnosing, and treating mental disorders – especially those related to long and repeated deployments and combat stresses. In addition, the findings of this and other surveillance reports suggest that military medical research, force health protection, and clinical practice efforts should focus on improving the prevention, treatment, and rehabilitation of back disorders among U.S. military members.